## Declaration and Power of Attorney

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled "EFFLUENT GAS STREAM TREATMENT SYSTEM HAVING UTILITY FOR OXIDATION TREATMENT OF SEMICONDUCTOR MANUFACTURING EFFLUENT GASES," the specification of which:

	was filed on and was amended or	, as Applic	eation Serial No		<del></del>	
I hereby stat specification,	e that I have revie	wed and under as amended by a	estand the contents	of the a	ibove-r	eferenced
I acknowledg application in	e the duty to disclo accordance with Title	se information 237, Code fo Fe	which is material deral Regulations, §	to the exa 1.56(a).	aminati	on of this
application(s) foreign applic	n foreign priority ben for patent or invento cation for patent or which priority is clain	or's certificate li inventor's certi	sted below and have	e also ider	ntified l	below any
Prior Fore	ign Application(s)			<u>Pr</u>	iority C	<u>laimed</u>
None (Number)		(Country)	(Day/Month/Year	Filed)	Yes	No
application(s) application is a paragraph of information as	m the benefit under listed below and, in not disclosed in the pr Title 35, United State defined in Title 37, of the prior applicat	insofar as the rior United State tes Code, §112 Code of Federal	subject matter of e s application in the r , I acknowledge the Regulations, §156(a	each of the manner pro- e duty to a a), which a	ne clain ovided b disclose occurre	ns of this by the first e material d between
	on Serial No.)	(Filing Da	•	(Status)	•	
r nereny appoi	int the following attor	meys or agents	to prosecute this app	plication 2	and to the	ransact all

business in the Patent and Trademark Office connected therewith:

Steven J. Hultquist, Registration No. 28,021 Janet Elliott, Registration No. 33,594

Direct all telephone calls to Steven J. Hultquist, 919/990-9531. Address all correspondence to Steven J. Hultquist, IP/TL, P.O. Box 14329, Research Triangle Park, NC 27709.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements, and the like, so made are punishable by fine or imprisonment, or both, under Section 1001 or Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor <u>Mark Holst</u>		
Inventor's signature	Date:	
Residence 124 Homewood Drive, Concord, California 94518		
Citizenship USA		
Post Office Address 124 Homewood Drive, Concord, California 94518		
Full name of second inventory / Kent Carpenter		
Inventor's signature	D-4	12/6/96
Residence 257 Butternut Lane, Stamford, Connecticut 06903		10,4170
Citizenship USA		<del></del>
Post Office Address 257 Butternut Lane, Stamford, Connecticut 06903		·
		**************************************
Full name of third inventor Scott Lane		
Inventor's signature		
Residence 1233 West Morelos Street, Chandler, Arizona 85224		
Citizenship USA		
Post Office Address 1233 West Morelos Street, Chandler, Arizona 8522	4	
·		
Full name of fourth inventor Prakash V. Arya		
Inventor's signature Prakash vi Any.	Date:	12/06/9
Residence 150 Bennett Avenue, Apt. 6A, New York, New York 10040		
Citizenship <u>India</u>		
Post Office Address 150 Rannott Avanua Ant 64 Navy Varla Navy V	- 1 100	10

## Declaration and Power of Attorney

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	is attached hereto. was filed on and was amended o	, as Applic	ation Serial No	
I hereby sta specification,	te that I have revieusly including the claims,	ewed and under as amended by a	stand the contents of the same stand the contents of the same standard transfer standard transfer standard transfer standard the same standard transfer stan	the above-referenced above.
I acknowledge application in	ge the duty to disclo accordance with Titl	ose information e 37, Code fo Fe	which is material to the deral Regulations, §1.56(	e examination of this a).
application(s) foreign appli	) for patent or invent	or's certificate list inventor's certificate	e 35, United States Code sted below and have also ficate having a filing da	identified below any
Prior Fore	eign Application(s)			Priority Claimed
None				
(Number)		(Country)	(Day/Month/Year Filed)	Yes No
application (s application is paragraph of information a	) listed below and, not disclosed in the p Title 35, United Stas defined in Title 37,	insofar as the strior United States ates Code, §112, Code of Federal	sed States Code, §120 esubject matter of each of application in the manner of acknowledge the duty Regulations, §156(a), what it is a property or acknowledge the duty Regulations, §156(a), what is a property or acknowledge the duty of the control	of the claims of this er provided by the first to disclose material nich occurred between
(Applicati	on Serial No.)	(Filing Dat	te) (Stat	us)
T 1 1				

I hereby appoint the following attorneys or agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Steven J. Hultquist, Registration No. 28,021 Janet Elliott, Registration No. 33,594

Direct all telephone calls to Steven J. Hultquist, 919/990-9531. Address all correspondence to Steven J. Hultquist, IP/TL, P.O. Box 14329, Research Triangle Park, NC 27709.

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Full name of first inventor Mark Holst		
Inventor's signature // ///	Date:	17/16/96
Residence 124 Homewood Drive, Concord, California 94518		
Citizenship USA		
Post Office Address 124 Homewood Drive, Concord, California 94518		
Full name of second inventors Wast Comme		
Full name of second inventor Kent Carpenter  Inventor's signature		
Residence 257 Butternut Lane, Stamford, Connecticut 06903		
Citizenship USA	<del></del>	
Post Office Address 257 Butternut Lane, Stamford, Connecticut 06903		
Full name of third inventor Scott Lane		
Inventor's signature	Date:	
Residence 1233 West Morelos Street, Chandler, Arizona 85224		
Citizenship USA		
Post Office Address 1233 West Morelos Street, Chandler, Arizona 8522	4	
<b>&gt;</b>		
Full name of fourth inventor Prakash V. Arya		
Inventor's signature	Date:	
Residence 150 Bennett Avenue, Apt. 6A, New York, New York 10040		
Citizenship India		•
Post Office Address 150 Bennett Avenue, Apt. 6A, New York, New York	ork 100	)40

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I hereby state that I have reviewed and understand the contents of the above-referenced specification, including the claims, as amended by any amendment referred to above.  I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code fo Federal Regulations, §1.56(a).  I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application of which priority is claimed:  Prior Foreign Application(s)  Priority Claimed  None (Number)  (Country)  (Day/Month/Year Filed)  Yes No  I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §156(a), which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.  (Application Serial No.)  (Filing Date)  (Status)	*****	is attached hereto. was filed on and was amended or	, as Applica	ation Serial No		<del></del>
application in accordance with Title 37, Code fo Federal Regulations, §1.56(a).  I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application of which priority is claimed:  Prior Foreign Application(s)  Priority Claimed  None (Number)  (Country)  (Day/Month/Year Filed)  Yes No  I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §156(a), which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.	I hereby state specification, in	that I have revie	wed and under as amended by a	stand the contents ny amendment refer	of the above red to above.	-referenced
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(Application Serial No.) (Filing Date) (Status)	application(s) application is n paragraph of Tinformation as the filing date	listed below and, ot disclosed in the profitle 35, United Standefined in Title 37,	insofar as the s rior United States tes Code, §112, Code of Federal	subject matter of east application in the macknowledge the Regulations, §156(a	ach of the clanamer provided duty to disclend, which occur	aims of this d by the first ose material red between
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run name of first inventor <u>Mark Hoist</u>		
Inventor's signature	Date:	
Residence 124 Homewood Drive, Concord, California 94518		
Citizenship <u>USA</u>	·	
Post Office Address 124 Homewood Drive, Concord, California 94518		
Full name of second inventor Kent Carpenter		
Inventor's signature	Date:	
Residence 257 Butternut Lane, Stamford, Connecticut 06903		M Marin A Statement Comment Comment
Citizenship <u>USA</u>		
Post Office Address 257 Butternut Lane, Stamford, Connecticut 06903		
Full name of third inventor Scott Lane		
Inventor's signature	Date:	12/1/96
Residence 1233 West Morelos Street, Chandler, Arizona 85224		
Citizenship USA		
Post Office Address 1233 West Morelos Street, Chandler, Arizona 8522	4	
•		
Full name of fourth inventor Prakash V. Arya	V	
Inventor's signature		
Residence 150 Bennett Avenue, Apt. 6A, New York, New York 10040		
Citizenship India		
Post Office Address 150 Bennett Avenue, Apt. 6A, New York, New Y.		

## **ASSIGNMENT**

ATMI Ecosys Corporation, having offices at 617 River Oaks Parkway, San Jose, California, 95134, is the assignee and owner of the following patent and patent applications in accordance with Assignments recorded in the assignments recorded in the assignment records of the United States Patent and Trademark Office as below identified,

Attorney Docket Number	U.S. Patent	Date U.S. Patent Granted	Title of U.S. Patent Application	Assignment Recorded, Reel Number/Frame Number
137FWCE	5,777,058	7/7/1998	Process for Sorption of Hazardous Waste Products from Exhaust Gas Streams	7257/0842
147 E	5,011,520	4/30/1991	Hydrodynamic Fume Scrubber	8283/0316
154E	5,676,712	10/14/1997	Flashback Protection Apparatus and Method for Suppressing Deflagration In Combustion Susceptible Gas Flow	7776/0614
159CPAE	5,914,091	6/22/1999	Point-of-Use Catalytic Oxidation Apparatus and Method for Treatment of VOC-Containing Gas Streams	8064/0555
161E	5,873,388	2/23/1999	System for Stabilization of Pressure Perturbations from Oxidation systems for Treatment of Process Gases from Semiconductor Manufacturing Operations	8030/0610
162/CIPE	5,851,293	12/22/1998	Flow-Stabilized Wet Scrubber System For Treatment Of Process Gases From Semiconductor Manufacturing Operations	8745/0367
163E	5,955,037	9/21/1999	Effluent Gas Stream Treatment System Having Utility For Oxidation Treatment Of Semiconductor Manufacturing Effluent Gases	8387/0516
167E	5,846,275	12/8/1998	Clog-Resistant Entry Structure For Introducing A Particulate Solids- Containing Fluid Stream To A Fluid Processing System	8394/0938

Attorney Docket Number	U.S. Patent	Date U.S. Patent Granted	Title of U.S. Patent Application	Assignment Recorded, Reel Number/Frame Number
167CIPE	5,935,283	8/10/1999	Clog-Resistant Entry Structure For Introducing A Particulate Solids- Containing And/Or Solids-Forming Gas Stream To A Gas Processing System	8984/0441
168E	5,833,888	11/10/1998	Weeping Weir Gas/Liquid Interface Structure	8390/0156
170A	4,661,056	4/28/1987	Turbulent Incineration of Combustible Materials Supplied in Low Pressure Laminar Flow	8989/0895
201CON	6,030,591	2/29/2000	Process for Removing and Recovering Halocarbons from Effluent Process Streams	9361/0694

			Low Pressure Laminar Flow	
201CON 6,	030,591	2/2//2000	Process for Removing and Recovering Halocarbons from	9361/0694
			Effluent Process Streams	
	· · · · · · · · · · · · · · · · · · ·		1	
	·			Assignment
Attorney U.S	. Patent	Date U.S. Patent		Recorded, Reel
Docket Ap	plication	Application		Number/Frame
Number	No.	Filed	Title of U.S. Patent Application	Number
163ECON 09/4	00,662	9/20/1999	Effluent Gas Stream Treatment	8387/0516
			System Having Utility For	333113323
			Oxidation Treatment Of	
			Semiconductor Manufacturing Effluent Gases	
317CPA 09/0	86,033	11/22/1999	Apparatus And Method	9221/0584
			For Point-Of-Use	)
			Abatement Of Fluorocompounds	

Advanced Technology Materials Inc, for the benefit of itself, its successors and assigns, all inclusively hereinafter referred to as the "Assignee", desires to acquire the entire right, title and interest in and to such inventions, such applications, all inventions disclosed in such applications identified in the above table, and any and all Letters Patents of the United States and of all other countries which may be granted for such invention or inventions, or any of them.

ATMI Ecosys Corporation, hereby conveys, assigns and transfers to the Assignee its full and entire right, title and interest in and to such inventions and such application, including all priority rights arising therefrom, all inventions disclosed in such application, and any and all Letters Patents of the United States and of all other countries, together with the right to apply for such Letters Patents which may be granted for such invention, inventions, or any of them.

By this Assignment, the Assignee has, holds and enjoys such inventions, such application, and such Letters Patents, for its own use and benefit, to the full end of the term or terms for which such Letters Patents may be granted, as fully and entirely as the same would have been held and enjoyed by ATMI Ecosys Corporation, had this assignment not been made.

On behalf of ATMI Ecosys Corporation, the undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States and the appropriate officers of all foreign countries to issue any and all Letters Patents which may be granted on such applications above referred to or for such inventions, or any of them, to the Assignee in accordance with the terms of this instrument.

ATMI Ecosys Corporation, hereby agrees to execute and sign without further consideration any other legal documents, and any other assignments and any divisional, continuing, renewal, reissue or other applications for all patents that may be appropriate and may be deemed necessary by the Assignee to fully secure to the Assignee its interests in such inventions or any part thereof and in such patents or any of them.

ATMI Ecosys Corporation, further covenants and agrees ATMI Ecosys Corporation that will communicate to the Assignee, its successors, assigns or other legal representatives, any facts known to ATMI Ecosys Corporation relating to such invention and any patent that may be granted thereon, and will testify as to the same in any interference or litigation when requested to do so.

ATMI Ecosys Corporation hereby covenants that ATMI Ecosys Corporation has not hitherto assigned or granted any license to make, use or sell said invention, and that ATMI Ecosys Corporation will not hereafter purport to assign, license or execute any instrument to that effect in conflict with this assignment.

July 26, 2001

Date

Name: Daniel P. Sharkey

Title: CFO, Treasure and Secretary